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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,833	12/21/2001	Frank L. Wu	016295.0730	2575

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EXAMINER

STOYNOV, STEFAN

ART UNIT PAPER NUMBER

2116

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/027,833

Applicant(s)

WU ET AL.

Examiner

Stefan Stojnov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14, 15, 18, 19, and 23-30 is/are allowed.
- 6) ☒ Claim(s) 1 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-11, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/21/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Jacobson.

Re claims 1, Jacobson discloses a multi-node computer system comprising:

a plurality of nodes (FIG. 1), wherein each node comprises

a processor (FIG. 6, PROCESSOR 602) operable to execute an operating system

(Jacobson discloses an operational server containing a processor providing operating system information to be transferred to each host (column 12, lines 4-10, column 3, lines 2-4, FIG. 6, PROCESSOR 602). Further Jacobson discloses the processor executing software routines and series of instructions (column 13, lines 9-14). In order for the server to accomplish the tasks described above, an operating system must be present on the server with the processor executing instructions and commands.), and

a BIOS component (column 10, lines 1-4) operable to store a BIOS associated with processor (column 9, lines 60-65, column 10, lines 7-11), wherein the BIOS in a node may be synchronized with the BIOS of another node such that BIOS coherence may be maintained between two or more nodes (column 10, lines 12-19).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson in view of Kumar.

Re claim 20, Jacobson discloses a method of synchronizing a plurality of BIOS (column 10, lines 12-14) for a multiple-node computer system (FIG. 1) and a plurality of processors operable to execute an operating system (Jacobson discloses an operational server and multiple hosts (FIG. 1). The server contains a processor providing operating system information to be transferred to each host (column 12, lines 4-10, column 3, lines 2-4, FIG. 6, PROCESSOR 602). Further Jacobson discloses the processor executing software routines and series of instructions (column 13, lines 9-14) and the host initializing upon receipt of the operating "system image" (column 10, lines 7-19. In order for the server and the hosts to accomplish the tasks described above, an operating system must be present on the server and the hosts with corresponding processor executing instructions and commands.), wherein each processor is associated with a BIOS (column 9, lines 60-65, column 10, lines 7-11). Jacobson also discloses updating the BIOS for a selected node (column 10, lines 5-7) and updating all the nodes in an aggregated multiple-node computer system (column 1, lines 26 and 27, column 10, lines 12-19).

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Jacobson fails to disclose plurality of processors for each node, a partitioned multiple-node computer system as well as configuring the partitioning into aggregate system prior of BIOS update and restoring the partitioning system after the BIOS update.

Kumar teaches each node comprising plurality of processor (FIG. 1, processor cluster 125). Kumar also describes a partitioned multiple-node system (paragraph 0038, lines 6-9 and FIG. 6), configuring the partitioned multiple-node computer system as an aggregate (paragraph 0038, lines 9 and 10, and FIG. 5), and restoring the multiple-node computer system to a partitioned multiple-node computer system (paragraph 0038, lines 6-9 and FIG. 6). In Kumar, plurality of processors within each node (the nodes distributed across multi-node architecture) enables building larger systems with scalable performance (paragraph 0003, lines 8-13). Kumar's dynamic partitioning (splitting or merging partitions) is for reliable and efficient software upgrade in a multi-node system (paragraph 0046). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use plurality of processors within each node and the dynamic partitioning, as suggested by Kumar for the multi-node computer system disclosed by Jacobson in order to synchronize the plurality of BIOS for a partitioned multiple-node computer system.

#### ***Allowable Subject Matter***

Claims 2-11, 21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14, 15, 18, 19, 23-30 are allowed.

#### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Stoykov whose telephone number is (571) 272-4236. The examiner can normally be reached between 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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